(1) No changes have been made to the process since the time of the emission test; and

(2) The operating conditions and test methods used during testing conform to the requirements of this subpart; and

(3) The control device and process parameter values established during the previously-conducted emission test are used to demonstrate continuous compliance with this subpart.

(c) For new sources, you must demonstrate initial compliance no later than 180 calendar days after April 29, 2003 or within 180 calendar days after startup of the source, whichever is later.

§ 63.8687 What performance tests, design evaluations, and other procedures must I use?

(a) You must conduct each performance test in Table 3 to this subpart that applies to you.

(b) Each performance test must be conducted under normal operating conditions and under the conditions specified in Table 3 to this subpart.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(d) Except for opacity and visible emission observations, you must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour.

(e) You must use the following equations to determine compliance with the emission limitations.

(1) To determine compliance with the particulate matter mass emission rate, you must use Equations 1 and 2 of this section as follows:

$$E = M_{PM}/P \qquad (Eq. 1)$$

Where:

E = Particulate matter emission rate, kilograms (pounds) of particulate matter per megagram (ton) of roofing product manufactured.

M_{PM} = Particulate matter mass emission rate, kilograms (pounds) per hour, determined using Equation 2.

P = The asphalt roofing product manufacturing rate during the emissions sampling period, including any material trimmed from the final product, megagram (tons) per hour.

$$M_{PM} = C * Q * K \qquad (Eq. 2)$$

Where:

M_{PM} = Particulate matter mass emission rate, kilograms (pounds) per hour.

C = Concentration of particulate matter on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 to this subpart.

Q = Vent gas stream flow rate (dry standard cubic meters per minute) at a temperature of 20 °C as measured by the test method specified in Table 3 to this subpart.

K = Unit conversion constant (0.06 minute-kilogram/hour-gram.

(2) To determine compliance with the total hydrocarbon percent reduction standard, you must use Equations 3 and 4 of this section as follows:

$$RE = \left[\left(M_{THCi} - M_{THCo}\right)/\left(M_{THCi}\right)\right] * (100) \qquad (Eq. 3)$$

Where:

RE = Emission reduction efficiency, percent.

M_{THCi} = Mass flow rate of total hydrocarbons entering the control device, kilograms (pounds) per hour, determined using Equation 4.

M_{THCo} = Mass flow rate of total hydrocarbons exiting the control device, kilograms (pounds) per hour, determined using Equation 4.

$$M_{THC} = C * Q * K \qquad (Eq. 4)$$

Where:

M_{THC} = Total hydrocarbon emission rate, kilograms (pounds) per hour.

C = Concentration of total hydrocarbons on a dry basis, parts per million by volume (ppmv), as measured by the test method specified in Table 3 to this subpart.

Q = Vent gas stream flow rate (dscmm) at a temperature of 20 °C as measured by the test method specified in Table 3 to this subpart.

K = Unit conversion constant (3.00E–05) $(ppmv)^{-1}$ (gram-mole/standard cubic meter) (kilogram/gram) (minutes/hour)),

where standard temperature for gram-mole/standard cubic meter is 20 °C.

(3) To determine compliance with the combustion efficiency standard, you must use Equation 5 of this section as follows:

$$CE = \left[1 - (CO/CO_2) - (THC/CO_2)\right] \quad \text{(Eq. 5)}$$

Where:

CE = Combustion efficiency, percent.

CO = Carbon monoxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

CO_2 = Carbon dioxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

THC = Total hydrocarbon concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

(4) To determine compliance with the total hydrocarbon destruction efficiency standard for a combustion device that does not use auxiliary fuel, you must use Equation 6 of this section as follows:

$$THC\ DE = \left[(CO + CO_2)/(CO + CO_2 + THC)\right] \quad \text{(Eq. 6)}$$

Where:

THC DE = THC destruction efficiency, percent.

CO = Carbon monoxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

CO_2 = Carbon dioxide concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

THC = Total hydrocarbon concentration at the combustion device outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 to this subpart.

§ 63.8688 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

(2) To determine the 3-hour average, you must:

(i) Have a minimum of four successive cycles of operation to have a valid hour of data.

(ii) Have valid data from at least three of four equally spaced data values for that hour from a CPMS that is not out-of-control according to your site-specific monitoring plan.

(iii) Determine the 3-hour average of all recorded readings for each operating day, except as stated in § 63.8690(c). You must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data (*i.e.,* not from out-of-control periods).

(3) You must record the results of each inspection, calibration, and validation check.

(b) For each temperature monitoring device, you must meet the requirements in paragraph (a) of this section and the following:

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a noncryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 °C or 1.0 percent of the temperature value, whichever is larger.

(3) If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 °F.